CELMS-PM-M

26 August 1992

Site: Maline Creek

1D#: MOD980631162

8-26-92

MEMORANDUM FOR RECORD

SUBJECT: Visit to Hazardous Waste Site on the Bank of Maline Creek at the Certanteed Property

1. ATTENDEES: Those in attendance were:

2. PURPOSE: EPA requested this visit to evaluate the erosion problems in Maline Creek adjacent to an asbestos land fill.

3. OBSERVATIONS:

The site visited is located in the SE quadrant of the intersection of Bellefontaine Road and St. Cyr where St. Cyr turns to the east from Bellefontaine Road. The specific areas of concern is located on the east (left decending) bank of Maline Creek beginning approximately 1400 feet downstream of the intersection of Bellefontaine Road and Maline Creek and continuing approximately 1000 feet downstream. The sites are all on the outside bank of a bend in the creek and are adjacent to a large landfill mound of asbestos waste which EPA indicated $^{\circ}$ was covered with an earthen cap in 1979.

The landfill mound appears to be located at elevations above that which would be flooded by a 50 year frequency flood event and appears to be in excellent condition. It should be noted that it was impossible to tell how far the landfill might extend in various directions or how deep it was placed. It does not appear that the "basic" landfill area is in immediate danger of massive erosion. However, at considerably lower elevations within the creek there are "outcroppings" of asbestos material which appear to have been solidified into a mass by combining them with concrete or some type of slurry. These outcroppings, which are generally located along the creek adjacent to the landfill site, are obviously exposed to erosion by the creek and are worn smooth to the extent that they almost appear to be limestone outcroppings. Careful examination indicates that the layers of these outcroppings are, in fact, asbestos siding or shingles. It is uncertain whether these masses of asbestos material are extentions of the basic landfill in low areas of the topography leading to the creek or whether they were placed there to prevent the creek bank from eroding in the direction of the landfill. It does not appear that these outcroppings are the result of dumping this material over the creek bank because they are an integral part of the bank in the locations where they are found.

The creek channel in this area is generally about 15 feet deep and the side slopes of the channel are quite steep. Because the side slopes of the channel are eroded in many locations, it is difficult to estimate the original design slope of the channel walls. A conservative estimate of the intended slope of the channel would be 1 on 1 or steeper. The bed of the channel in this area is approximately 40 feet wide and is littered with asbestos pipe, pieces of asbestos shingles or siding and chunks of molded asbestos slurry. Pieces of limestone rock which was probably placed on the channel bank to stabilize slopes also litters the channel bed. The asbestos pipe, which is quite prevalent in the bed of the channel, does not appear to have been eroded from any known landfill site because it is located throughout the reach of the channel and can be observed at locations upstream of the basic landfill site. The limestone rock which is observed in the bed of the channel is clearly not natural to the creek. The presence of this rock in the bed of the channel is a commentary on the futility of carelessly using rock to protect channel slopes without an engineered design.

No information was available on the design of the basic landfill area, the original topography of the landfill area or the condition of the asbestos placed in the landfill.

4. STATUS: Mr. MacDonald of the EPA indicated after the site visit that EPA wishes SLD to prepare a rough design solution to the erosion problem along the creek adjacent to the landfill and a rough cost estimate to accomplish this work. EPA has been contacted to provide an appropriate transfer of funds for this work.

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Project Manager

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